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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|--------------------------|---------------------|------------------|
| 10/567,693  | 02/07/2006  | Hendrik Anton Van Esveld | NL 030973           | 3942             |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 |             |                          | EXAMINER            |                  |
|   |             |                          | WILLIAMS, JOSEPH L  |                  |
| BRIARCLIFF MANOR, NY 10510                              |             |                          | ART UNIT            | PAPER NUMBER     |
|   |             |                          | 2879                |                  |
|   |             |                          |                     |                  |
|   |             |                          | MAIL DATE           | DELIVERY MODE    |
|   |             |                          | 10/31/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.  | Applicant(s)   |  |  |  |  |
|---|--|--|--|--|--|--|
|   | 10/567,693   | VAN ESVELD ET AL.  |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |  |
|   | Joseph L. Williams   | 2879   |  |  |  |  |
| The MAILING DATE of this communication ap<br>Period for Reply   | pears on the cover sheet with the c  | orrespondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE | N. nely filed the mailing date of this communication. (D) (35 U.S.C. § 133). |  |  |  |  |
| Status  |  |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on 19 J  | <u>uly 2007.</u>   |  |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)☐ This  | This action is <b>FINAL</b> . 2b) This action is non-final.  |  |  |  |  |  |
| 3) Since this application is in condition for allowa  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |  |
| closed in accordance with the practice under  | Ex parte Quayle, 1935 C.D. 11, 45  | 53 O.G. 213.   |  |  |  |  |
| Disposition of Claims   |  | •  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.   |  |  |  |  |  |  |
| •   | 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-12</u> is/are rejected.   |  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   | 7) Claim(s) is/are objected to.  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/o  | or election requirement.   |  |  |  |  |  |
| Application Papers  | ·<br>·   |  |  |  |  |  |
| 9) ☐ The specification is objected to by the Examine  | ar ·   |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) acc  | •  | Examiner   |  |  |  |  |
| Applicant may not request that any objection to the   | •  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct  |  |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Ex  |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  | •  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign   | nriority under 35 H S C & 119(a)   | a-(d) or (f)   |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  | priority under 35 0.5.5. § 119(a)  | -(u) or (i).   |  |  |  |  |
| 1. Certified copies of the priority document  | ts have been received.   | •  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |  |  |  |  |  |
| 3. Copies of the certified copies of the prior  | rity documents have been receive   | ed in this National Stage  |  |  |  |  |
| application from the International Burea  |  |  |  |  |  |  |
| * See the attached detailed Office action for a list  | of the certified copies not receive  | d.   |  |  |  |  |
|   |  |  |  |  |  |  |
| •   |  |  |  |  |  |  |
| Attachment(s)   | * <u>-</u>   |  |  |  |  |  |
| Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) Interview Summary<br>Paper No(s)/Mail Da  |  |  |  |  |  |
| Notice of Draftsperson's Patent Drawing Review (P10-948)     Information Disclosure Statement(s) (PTO/SB/08)  | 5) Notice of Informal P  |  |  |  |  |  |
| Paper No(s)/Mail Date <u>4/19</u> .   | 6) Other:  |  |  |  |  |  |

### **DETAILED ACTION**

The amendment and response filed on 19 July 2007 has been entered and overcomes the rejections to the claims.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, 10, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al. (US 5,994,839).

Regarding claim 1, Yamamoto ('839) teaches in figures 1-3 and the corresponding text, a high-pressure discharge lamp comprising: a discharge vessel (1) enclosing a discharge space (no number) which contains an ionizable filling, the discharge vessel (1) having a first and a second mutually opposed neck-shaped portion provided with a pair of electrodes (7a, 7b) arranged in the discharge space, each electrode being tubular over its entire length, at least one of the electrodes being directly coupled at an end not arranged in the discharge space, to a rod (19) which is coupled at a distal end to a current-supply conductor (20), a melting-ceramic joint (18) being provided between the current-supply conductor, the rod and a wall of the respective first and a second mutually opposed neck-shaped portions, thereby providing a gas-tight closure of the discharge space.

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Regarding claim 2, Yamamoto ('839) teaches the electrodes are free from coils in the discharge space.

Regarding claim 9, Yamamoto ('839) teaches the electrodes are made of tungsten.

Regarding claim 10, the amount of current is directed towards the operation of the lamp and is thus not germane to the structure. Thus, the amount of current limitation has not been afforded patentable weight.

Regarding claim 11, Yamamoto ('839) teaches the rod is made of molybdenum.

Regarding claim 12, Yamamoto ('839) teaches the current supply conductor is made from niobium.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US 5,994,839) in view of in view of White (US 3,558,964).

Regarding claim 3, Yamamoto ('839) teaches all of the claimed inventions except for the electrodes extending outside of the discharge vessel.

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Further regarding claim 3, White ('964) teaches in figure 1 a high-pressure discharge lamp comprised of, in part, the electrodes extending outside of the discharge vessel for the purpose of providing added support for the electrodes.

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the extending electrodes of White in the lamp of Yamamoto for the purpose of providing added support for the electrodes.

Regarding claim 4, Yamamoto ('839) teaches the electrodes are each partially filled with a rod welded to a side of the electrodes facing away from the discharge space.

Regarding claim 5, Yamamoto ('839) teaches the rod extends into the discharge space.

Regarding claim 8, Yamamoto teaches all of the claimed limitations except for the claimed ratio between the electrodes and the neck portion.

Further regarding claim 8, White ('964) teaches in column 3, line 52+ that the ratio of the outer diameter  $d_{out}$  of the tubular electrodes and the inner diameter  $d_{nsp}$  of the neck-shaped portions is in the range:

$$0.8 \le d_{out}/d_{nsp} \le 0.95$$

for the purpose of improving the stability of the electrode.

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Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the electrode and neck portion ratio of White in the lamp of Yamamoto for the purpose of improving the stability of the electrode.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US 5,994,839) in view of in view of Pollard (US 3,916,241).

Regarding claim 6, Yamamoto ('839) teaches all of the claimed inventions except for claimed electrodes sizes.

Further regarding claim 6, Pollard ('241) teaches that the ratio between the inner diameter d<sub>in</sub> and the outer diameter d<sub>out</sub> of the electrodes (3) is in the range:

$$0.2 \le d_{in}/d_{out} \le 0.8$$

for the purpose of improving the discharge of the lamp.

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the electrode diameter of Pollard in the lamp of Yamamoto for the purpose of improving the discharge of the lamp.

Regarding claim 7, Pollard ('241) teaches that the inner diameter of the tubular electrodes is at least 20 micrometers.

The reason for combining is the same as for claim 6 above.

3. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph L. Williams Primary Examiner Art Unit 2879